1600

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/651,150B

DATE: 11/08/02
TIME: [illegible]

Input Set : D:\seqlist.txt
Output Set : N:\CRF4\11082002\I651150B.raw

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  5  <110> APPLICANT: Payan, Donald
  9  <120> TITLE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING
 14  <130> FILE REFERENCE: RIGL-303CON
 17  <140> CURRENT APPLICATION NUMBER: US 09/651,150B
 19  <141> CURRENT FILING DATE: 2000-08-30
 24  <150> PRIOR APPLICATION NUMBER: US 09/050,861
 29  <151> PRIOR FILING DATE: 1998-03-30
 29  <160> NUMBER OF SEQ ID NOS: 35
 34  <170> SOFTWARE: PatentIn version 3.1
 37  <210> SEQ ID NO: 1
 39  <211> LENGTH: 1911
 41  <212> TYPE: DNA
 43  <213> ORGANISM: Homo sapiens
 47  <400> SEQUENCE: 1
 49  aaaggagtaa acagcatgtc tccatccctc tctctaaggg ctcttggatg gacttgaac    60
 50  tctcgaaggg acaatggact tctggatttg gccactttac ttcctgccag tatcacagac  120
 52  cctcaggatc ctcccagaag taaaggtaga gggggagctg ggcggatcag ttaccatcaa  180
 54  atgcccactt cctgaaatcc atgtgagcat atatctatgc cgggagatgg ctggatctga  240
 56  aacatatagt acegtacat ccacacacaa cttcatcaag gcagaataca agagccgaat  300
 58  tactctgaaa caatacttac acaagaatct gttcctagtg gaggtaacac agctgacaca  360
 60  aagtgacagc cgagtctatg cctgcggagc gggcatgaac acagaccggg gaaagaccca  420
 61  gaaagtgact ctgaatgtcc acagtgaata cgagccatca tgggaagagc agccaatgcc  480
 63  tgagactcca aaatgtttc atgtgccta tttgttccag atgcctgcat atgccagttc  540
 64  ttccaaattc ctaaccaaag ttaccacacc agctcaaagg ggcaaggtcc ctccagttca  600
 65  ccactcctcc cccaccaccc aaatcaccca ccgccctcga gtgtccagag catcttcaat  660
 70  agcaggtgac aagccccaaa ccttcctcc atccactaca gcctcaaaaa tctcaactct  720
 72  gaacgagcta ctcaatccc aaaagccttg ctacaaccac cacaccaaga tgcacaggca  780
 74  gaaagcacta cactataact cacagtctca gaggaaagc caaggatttc acatcctgat  840
 76  ccccaaccatc ctaaacttt tcctgctgac acttctaagg ctgatgatga aaaaaaccat  900
 78  tgaaaaaaa aaaagccttc caaggcaggc ccacgaacta acgtgaaga tacgcaccct  960
 80  aaacagctcc aagaacccc acgagtctcc acaaccaggc tcccaaaaca acatctacaa 1020
 82  cgcctgccct cggcacacte ctagagcaga cgctgcaggc acagggaggg ccccagttcc 1080
 84  caccccacaa acacccatgc ccacaggccc gctacaagta tctgaatctc cctaactcaa 1140
 86  tacccatct atgaaaaca gttctgaata agtaagcctc taccaccaac ctacagcat 1200
 88  gatctaggaa actgtttag atgactacat caatgttcct gcctgacaac tccccactca 1260
 90  tcccccaacc ctagctcag actgtggtgc caaggaattct catctatctg ctgatgtcca 1320
 92  atactgctt catctgttct cagagcgctc atcacttcc atccccatc tcgactccca 1380
 94  tcctctacta tctgtccccc taacacatgc tctacccca gctgtgtttg cacacctca 1440
 96  cacacactc tacttacaa ctcacctca agcatctaga acaattatcc caatgccact 1500
 98  tgcttccttt ccaaccctc aaacagacta tgggattttgc aagtgtttc ttccatatct 1560
100  ttaaccacac agtgttttt ct acaaaac ctaaatcaca tacatcaaa ctgacccaa 1620
102  accatagcta ttatctcaaa aataccacca aaattacat cttacaaaaa tacaacacttt 1680
104  tttctgcaag ttatcttaca tgctccact ccatcacta aaacagctc taatataaa 1740
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/651,150B

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

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106 a tcct taaa acgccttttgc cctcatccaa atgttaggcac ttactattga acatctactt      1800
108 gt ttcaactt tatcctcaaa acccacttat cttcatgtca tgataaccca aattattat      1860
110 ctagatatgc atatatatcc ataaattctc tttactctgt ctccatcttt t              1911

113 <210> SEQ ID NO: 2
115 <211> LENGTH: 324
117 <212> TYPE: PRT
119 <213> ORGANISM: Homo sapiens
121 <400> SEQUENCE: 2
123 Met Asp Arg Trp Leu Trp Pro Leu Tyr Phe Leu Pro Val Ser Gly Ala
124 1               5                   10                  15
126 Leu Arg Ile Leu Pro Glu Val Lys Val Glu Gly Glu Leu Gly Gly Ser
130             20                  25                  30
134 Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
144         35                  40                  45
147 Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
148     50                  55                  60
149 Thr Asn Phe Ile Lys Ala Glu Tyr Lys Gly Arg Val Thr Leu Lys Gln
151 65                  70                  75                  80
153 Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
155             85                  90                  95
157 Ser Asp Ser Gly Val Tyr Ala Cys Gly Ala Gly Met Asn Thr Asp Arg
159             100                 105                 110
161 Gly Lys Thr Gln Lys Val Thr Leu Asn Val His Ser Glu Tyr Glu Pro
163             115                 120                 125
165 Ser Trp Glu Glu Gln Pro Met Pro Glu Thr Pro Lys Trp Phe His Leu
166     130                 135                 140
168 Pro Tyr Leu Phe Gln Met Pro Ala Tyr Ala Ser Ser Ser Lys Ile Val
169 145                 150                 155                 160
171 Thr Arg Val Thr Thr Pro Ala Gln Arg Gly Lys Val Pro Pro Val His
173             165                 170                 175
175 His Ser Ser Pro Thr Thr Gln Ile Thr His Arg Pro Arg Val Ser Arg
176             180                 185                 190
178 Ala Ser Ser Val Ala Gly Asp Lys Pro Arg Thr Phe Leu Pro Ser Thr
179     195                 200                 205
181 Thr Ala Ser Lys Ile Ser Ala Leu Glu Gly Leu Leu Lys Pro Gln Thr
182 210                 215                 220
184 Pro Ser Tyr Asn His His Thr Arg Leu His Arg Gln Arg Ala Leu Asp
185 225                 230                 235                 240
187 Tyr Gly Ser Gln Ser Gly Arg Glu Gly Gln Gly Phe His Ile Leu Ile
188             245                 250                 255
190 Pro Thr Ile Leu Gly Leu Phe Leu Leu Ala Leu Leu Gly Leu Val Val
191             260                 265                 270
193 Lys Arg Ala Val Glu Arg Arg Lys Ala Leu Ser Arg Arg Ala Arg Arg
194         275                 280                 285
196 Leu Ala Val Arg Met Arg Ala Leu Glu Ser Ser Gln Arg Pro Arg Gly
198     290                 295                 300
200 Ser Pro Arg Ile Arg Ser Gln Asn Asn Ile Tyr Ser Ala Cys Pro Arg
202 305                 310                 315                 320
205 Arg Ala Arg Gly Ala Asp Ala Ala Gly Thr Gly Glu Ala Pro Val Pro
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/651,150B   DATE: 11/08/02   TIME: ....

Input File : D:\seqlist.txt
Output File : N:\CRF4\11082002\I651150B.raw

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206                   323                 350                 373
209 Gly Pro Gly Ala Pro Leu Pro Pro Ala Pro Leu Gln Val Ser His Ser
210                   340                 345                 352
213 Pro Trp Leu His Ala Pro Ser Leu Lys Thr Ser Cys Glu Tyr Val Ser
214                   355                 360                 365
217 Leu Tyr His Gln Pro Ala Ala Met Met Glu Asp Ser Asp Ser Arg Asn
219       370                 375                 380
221 Tyr Ile Asn Val Pro Ala
222 385                 390
225 <210> SEQ ID NO: 3
227 <211> LENGTH: 73
229 <212> TYPE: PRT
231 <213> ORGANISM: Homo sapiens
233 <400> SEQUENCE: 3
236 Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
238 1                 5                 10                  15
241 Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
242             20                 25                 30
245 Thr Asn Phe Ile Lys Ala Glu Trp Lys Gly Arg Val Thr Leu Lys Gln
246             35                 40                 45
249 Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
250       50                 55                 60
253 Ser Asp Ser Gly Val Tyr Ala Cys Gly
254 65                 70
257 <210> SEQ ID NO: 4
259 <211> LENGTH: 79
261 <212> TYPE: PRT
263 <213> ORGANISM: Homo sapiens
265 <400> SEQUENCE: 4
268 Leu Ser Leu Thr Cys Thr Val Ser Gly Ser Thr Phe Ser Asn Asp Tyr
270 1                 5                 10                  15
273 Tyr Thr Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile Gly
274             20                 25                 30
277 Tyr Val Phe Tyr His Gly Thr Ser Asp Asp Thr Thr Pro Leu Arg Ser
278             35                 40                 45
281 Arg Val Thr Met Leu Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Arg
282       50                 55                 60
285 Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
286 65                 70                 75
289 <210> SEQ ID NO: 5
291 <211> LENGTH: 73
293 <212> TYPE: PRT
295 <213> ORGANISM: Homo sapiens
299 <400> SEQUENCE: 5
301 Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser Asn
302 1                 5                 10                  15
305 Tyr Ala Asn Trp Val Gln Gln Lys Pro Asp His Leu Phe Thr Gly Ile
306             20                 25                 30
309 Gly Gly Thr Asn Asn Arg Ala Pro Gly Val Pro Ala Arg Phe Ser Gly
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RAW SEQUENCE LISTING   DATE: 11 ...
PATENT APPLICATION: US/09/651,150B   TIME: 1 ...

Input Set : **D:\seqlist.txt**
Output Set : **N:\CRF4\11082002\I651150B.raw**

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410            20                 40                 45
313 Ser Leu Ile Gly Asn Lys Ala Ala Leu Thr Ile Thr Gly Ala Gln Thr
314        50                 55                 60
317 Glu Arg Glu Ala Ile Tyr Phe Cys Ala
318 65                 70
321 <210> SEQ ID NO: 6
324 <211> LENGTH: 71
326 <212> TYPE: PRT
328 <213> ORGANISM: Homo sapiens
330 <400> SEQUENCE: 6
332 Thr Ser Leu Asn Cys Thr Phe Ser Asp Ser Ala Ser Gln Tyr Ile Trp
334 1                 5                 10                 15
337 Trp Tyr Arg Gln His Ser Gly Lys Ala Pro Lys Ala Leu Met Ser Ile
340        20                 25                 30
341 Phe Ser Asn Gly Glu Lys Glu Glu Gly Arg Phe Thr Ile His Leu Asn
344        35                 40                 45
345 Lys Ala Ser Leu His Phe Ser Leu His Ile Arg Asp Ser Gln Pro Ser
348        50                 55                 60
349 Asp Ser Ala Leu Tyr Leu Cys Ala
351 65                 70
354 <210> SEQ ID NO: 7
357 <211> LENGTH: 75
360 <212> TYPE: PRT
363 <213> ORGANISM: Homo sapiens
366 <400> SEQUENCE: 7
368 Val Thr Leu Arg Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp
370 1                 5                 10                 15
373 Tyr Arg Gln Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn
376        20                 25                 30
379 Asn Asn Val Pro Ile Asp Asp Ser Gly Met Pro Glu Asp Arg Phe Ser
382        35                 40                 45
385 Ala Lys Met Pro Asn Ala Ser Phe Ser Thr Leu Lys Ile Gln Pro Ser
388        50                 55                 60
391 Glu Pro Arg Asp Ser Ala Val Tyr Phe Cys Ala
393 65                 70                 75
396 <210> SEQ ID NO: 8
399 <211> LENGTH: 74
402 <212> TYPE: PRT
405 <213> ORGANISM: Homo sapiens
408 <400> SEQUENCE: 8
411 Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His
413 1                 5                 10                 15
401 Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe
403        20                 25                 30
405 Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg
406        35                 40                 45
409 Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys
410        50                 55                 60
413 Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/651,150B

Input Set : D:\seqlist.txt
Output Set : N:\CRF4\11082002\I651150B.raw

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414 <210> SEQ ID NO: 9
417 <211> LENGTH: 80
419 <212> TYPE: PRT
421 <213> ORGANISM: Homo sapiens
423 <400> SEQUENCE: 9
425 Ala Lys Met Ser Cys Glu Ala Lys Thr Phe Pro Lys Gly Thr Thr Ile
        1               5                   10                  15
431 Tyr Trp Leu Arg Glu Leu Gln Asp Ser Asn Lys Asn Lys His Phe Glu
                        20                  25                  30
435 Phe Leu Ala Ser Arg Thr Ser Thr Lys Gly Ile Lys Tyr Gly Glu Arg
                35                  40                  45
441 Val Lys Lys Asn Met Thr Leu Ser Phe Asn Ser Thr Leu Ile Phe Leu
                50                  55                  60
445 Lys Ile Met Arg Val Lys Pro Glu Asp Ser Gly Ile Tyr Phe Cys Ala
    65                  70                  75                  80
449 <210> SEQ ID NO: 10
451 <211> LENGTH: 76
453 <212> TYPE: PRT
455 <213> ORGANISM: Homo sapiens
457 <400> SEQUENCE: 10
461 Val Thr Ile Thr Cys Pro Phe Thr Tyr Ala Thr Arg Gln Leu Lys Lys
    1               5                   10                  15
465 Ser Phe Tyr Lys Val Glu Asp Gly Glu Leu Val Leu Ile Ile Asp Ser
                20                  25                  30
469 Ser Ser Lys Glu Ala Lys Asp Pro Arg Tyr Lys Gly Arg Ile Thr Leu
                35                  40                  45
473 Gln Ile Gln Ser Thr Thr Ala Lys Glu Phe Thr Val Thr Leu Lys His
                50                  55                  60
477 Leu Gln Leu Asn Asp Ala Gly Gln Tyr Val Cys Gln
    65                  70                  75
481 <210> SEQ ID NO: 11
483 <211> LENGTH: 84
485 <212> TYPE: PRT
487 <213> ORGANISM: Homo sapiens
491 <220> FEATURE:
493 <221> NAME/KEY: MISC_FEATURE
495 <222> LOCATION: (6)..(51)
497 <223> OTHER INFORMATION: "Xaa" at positions 6-7, 9-18, 20, 22, 25-32, 34-35, 37-48
and 50
499         -51 can be any amino acid.
503 <220> FEATURE:
504 <221> NAME/KEY: MISC_FEATURE
505 <222> LOCATION: (53)..(53)
506 <223> OTHER INFORMATION: "Xaa" at position 53 can be Phe, Val, or Ile.
512 <220> FEATURE:
514 <221> NAME/KEY: MISC_FEATURE
516 <222> LOCATION: (54)..(76)
518 <223> OTHER INFORMATION: "Xaa" at positions 54-69, 71, and 74-76 can be any amino
acid.
522 <220> FEATURE:
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE:
PATENT APPLICATION: US/09/651,150B   TIME:

Input Set : D:\seqlist.txt
Output Set: N:\CRF4\11082002\I651150B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 6,7,9,10,11,12,13,14,15,16,17,18,19,22,23,26,27,28,29,30
Seq#:11; Xaa Pos. 31,33,34,35,37,38,39,40,41,42,43,44,45,46,47,48,50,51,53
Seq#:11; Xaa Pos. 54,55,56,57,58,59,60,61,62,63,64,65,71,73,74,75,76,79,80
Seq#:11; Xaa Pos. 81
Seq#:25; Xaa Pos. 3,4,5

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/651,150B   DATE:
TIME:

Input Set : D:\seqlist.txt
Output Set : N:\CRF4\11082002\I651150B.raw

L:544 M:41 W: (40   "n" or "Xaa" used, for SEQ ID#:11 after pos.:
L:548 M:41 W: (40) "n" or "Xaa" used, for SEQ ID#:11 after pos.:76
L:552 M:41 W: (40) "n" or "Xaa" used, for SEQ ID#:11 after pos.:
L:556 M:41 W: (40) "n" or "Xaa" used, for SEQ ID#:11 after pos.:48
L:560 M:41 W: (40) "n" or "Xaa" used, for SEQ ID#:11 after pos.:04
L:564 M:41 W: (40) "n" or "Xaa" used, for SEQ ID#:11 after pos.:86
L:864 M:841 W: (40) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0